

**WHAT IS CLAIMED IS:**

1. An inter-communication mobile phone set comprising a main phone, a SIM card and a plurality of sub-phones;

the main phone being one of a multi-user main phone, a personal main  
5 phone, and an in-car main phone; the multi-user main phone, personal main phone and in-car main phone searching for sub-phones automatically and the frequencies thereof so that signals of the main phone and sub-phones inter-communicate to one another; the main phone being connected to other sub phone through a SIM card.

10 2. The inter-communication mobile phone set as claimed in claim 1, wherein the sub-phone has a type selected from one of a simple type, a pen-form sub-phone, a neck-tie form phone, a watch form sub-phone, a breast-suspending sub-phone, an ear-phone form sub-phone, a hat form sub-phone.

15 3. The inter-communication mobile phone set as claimed in claim 1, wherein the sub-phone is built in one of a portable audio, a translator, a notebook computer, a PDA, a personal computer expansion card, a pocket, a game machine, a camera etc.

20 4. The inter-communication mobile phone set as claimed in claim 1, wherein the inter-communication mobile phone set has no interference of electromagnetic wave and is installed in a hospital.

5. The inter-communication mobile phone set as claimed in claim 1, wherein the inter-communication mobile phone set is connected to Internet.

25 6. The inter-communication mobile phone set as claimed in claim 1, wherein the inter-communication mobile phone set is used in one of a wired system and a wireless system.

30 7. The inter-communication mobile phone set as claimed in claim 1, wherein the inter-communication mobile phone set is used in a hospital, and then is redirected to an indoor phone without electromagnetic wave interference.

8. The inter-communication mobile phone set as claimed in claim 1,

wherein no setting operation is used in the inter-communication mobile phone set, and thus the inter-communication mobile phone set is used in a variety of vehicles.